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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,097	05/29/2007	Wilfried Breuer	071308.0713	6015

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BAKER BOTTS L.L.P.  
PATENT DEPARTMENT  
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AUSTIN, TX 78701-4039

EXAMINER
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WILLOUGHBY, TERRENCE RONIQUE

ART UNIT	PAPER NUMBER
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2836

MAIL DATE	DELIVERY MODE
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06/27/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,097	<b>Applicant(s)</b> BREUER ET AL.	
	<b>Examiner</b> TERRENCE R. WILLOUGHBY	<b>Art Unit</b> 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/2/07</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 5, 11 and 16 recites the limitation "the capacitor" in the claims. There is insufficient antecedent basis for this limitation in the claims.
2. Claims 6, 12 and 17 recites the limitation "the power transmission in an energy distribution system" in the claims. There is insufficient antecedent basis for this limitation in the claims.
3. Claim 13 is objected to because the line 14 has a double spaced between the word "and" and "wherein". Please make the appropriate correction.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Applicant Acknowledged Prior Art ("AAPA") in view of Matsumura et al. (US 4,536,816).
6. Regarding claims 1 and 7, The AAPA in (Fig. 1) discloses a surge protector (1) comprising a spark gap (2), which has mutually opposite electrodes (3), a trigger circuit (5) for triggering the spark gap (2) and a light source (14), which is connected to a protective device (13), at ground potential for generating a trigger light, which can be

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supplied to a reception unit (11) of the trigger circuit (5) by means of at least one optical waveguide (15), the spark gap (2) and the trigger circuit (5) being at a high-voltage potential.

The AAPA does not disclose the reception unit (11) of the trigger circuit (5) having at least one power semiconductor component, which can be moved over, by means of the trigger light (14), from an off position in which a current flow via the power semiconductor component is interrupted, to an on position, in which a current flow via the power semiconductor component is made.

However, Matsumura et al. in (Fig. 7) discloses at least one power semiconductor component (13), which can be moved over, by means of a trigger light (6, 6a), from an off position in which a current flow via the power semiconductor component (13) is interrupted, to an position, in which a current flow via the power semiconductor component (13) is made (col. 6, ll. 35-37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the circuit of the AAPA to include the power semiconductor component (13) which can be moved over by means of a trigger light source (6, 6a) as taught by Matsumura et al. because the use of light-triggered thyristor are reliable and simpler to use other than photosensitive devices and trigger signal amplifying circuits that were necessary for the conventional electrical signal-triggered thyristor parts (Matsumura et al., col. 4, ll. 33-42).

7. Regarding claims 2 and 8, The AAPA in view of Matsumura et al. discloses the surge protector according to claims 1 and 7, wherein the power semiconductor

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components (Matsumura et al., Fig. 7, (13)) are in the form of thyristors (Matsumura et al., col. 6, ll. 21-23) which are connected in opposition and can be triggered optically (Matsumura et al., col. 4, ll. 33-42).

8. Regarding claims 3 and 9, The AAPA in view of Matsumura et al. discloses the surge protector according to claims 1 and 7, wherein the trigger circuit (AAPA, Fig. 1, (5)) has a capacitive voltage divider (AAPA, Fig. 1, (7, 8)), which has a capacitor (AAPA, Fig. 1, (8)) which would be bridged by means of the power semiconductor component (Matsumura et al., Fig. 7, (13)).

9. Regarding claims 4 and 10, The AAPA in view of Matsumura et al. discloses the surge protector according to claims 1 and 7, wherein the trigger circuit (AAPA, Fig. 1, (5)) is connected to a trigger electrode (AAPA, Fig. 1, (6)), whose distance from a first electrode (AAPA, Fig. 1, (3)) of the spark gap (AAPA, Fig. 1, (2)) is less than the distance between the first electrode (AAPA, Fig. 1, (3)) and a second electrode (AAPA, Fig. 1, (3)) opposite it, it being possible for the electrical potential of the second electrode (AAPA, Fig. 1, (3)) to be applied to the trigger electrode (AAPA, Fig. 1, (6)) by means of the trigger circuit (AAPA, Fig. 1, (5)). See AAPA, page 2, paragraph [0004].

10. Regarding claims 5 and 11, The AAPA in view of Matsumura et al. discloses the surge protector according to claims 1 and 7, wherein the spark gap (AAPA, Fig. 1, (2)) has at least two pairs of mutually opposite electrodes (AAPA, Fig. 1, (3)), which are arranged in series circuit with respect to one another, the capacitor (AAPA, Fig. 1, (8)) which can be bridged being connected in parallel with a pair of mutually opposite electrodes (AAPA, Fig. 1, (3)). See AAPA, page 2, paragraph [0004].

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11. Regarding claims 6 and 12, The AAPA in view of Matsumura et al. discloses the surge protector according to claims 1 and 7, wherein the spark gap (AAPA, Fig. 1, (2)) and the trigger circuit (AAPA, Fig. 1, (5)) are arranged on a platform (AAPA, Fig. 1, (4)) which is supported in a insulated manner by means of supports and is designed to bear components which are provided for the purpose of improving the power transmission in an energy distribution system. AAPA, page 1-2, paragraphs [0003] and [0004].

12. Regarding claim 13, The AAPA in view of Matsumura et al. discloses all the limitation recited above in claims 1 and 2.

13. Regarding claim 14, The AAPA in view of Matsumura et al. discloses all the limitation recited above in claim 3.

14. Regarding claim 15, The AAPA in view of Matsumura et al. discloses all the limitation recited above in claim 4.

15. Regarding claim 16, The AAPA in view of Matsumura et al. discloses all the limitation recited above in claim 5.

16. Regarding claim 17, The AAPA in view of Matsumura et al. discloses all the limitation recited above in claim 6.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERRENCE R. WILLOUGHBY whose telephone number is (571)272-2725. The examiner can normally be reached on 8-5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Sherry/  
Supervisory Patent Examiner, Art Unit 2836

TRW  
6/22/08